

# SAVE OUR LAKE

LAKE PONTCHARTRAIN BASIN FOUNDATION

## Breton Land Bridge Restoration Project

(Pontchartrain Coastal Lines of Defense Program)

Lake Pontchartrain Basin Foundation – Coastal Sustainability Program

Preservation and Restoration of the Breton Land Bridge is one of ten priority project areas within the Pontchartrain Coastal Lines of Defense Program for the Pontchartrain Basin (Figure 1). All projects within this program provide significant habitat restoration and flood protection. Hurricane Katrina caused 26,000 acres of wetland loss north of the Breton Land Bridge. This new open water area is amalgamating into a large lake. The Breton Land bridge separates this proto-lake from Breton Sound. Therefore, because of Hurricane Katrina the land bridge has become a critical landscape feature. These wetlands will be the key buffer to the St. Bernard levee and to maintaining the integrity of the Breton Sound Basin. Restoration includes marsh creation and shoreline protection. Numerous oil and gas wells and pipelines are protected by the Breton Land Bridge. Refineries are also within the levee'd area of St. Bernard Parish. Deterioration of the Breton Land bridge would threaten this energy infrastructure.

The Pontchartrain Coastal Lines of Defense Program represents an integrated set of projects which is based on the highly vetted Comprehensive Habitat Management Plan for the Pontchartrain Basin (2006). The CHMP was developed over two years by a team of qualified engineers, biologists and physical scientists including representation from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, University of New Orleans, Southeastern University, LA Department of Nature Resources, Pontchartrain Institute for Environmental Sciences and LSU AgCenter. The plan was peer-reviewed by representatives from National Marine Fisheries Service, Natural Resource Conservation Service, LSU, U.S. Geological Survey, LA Geological Survey, The Nature Conservancy, and EPA Gulf of Mexico Program Office and the Coalition to Restore Coastal Louisiana.

The final CHMP is a federally approved plan by the EPA Region VI office. The Coalition to Restore Coastal Louisiana and the Louisiana Wildlife Federation have passed resolutions endorsing both the Comprehensive Habitat Management Plan and the Pontchartrain Coastal Lines of Defense Program. Since its release, the Pontchartrain Coastal Lines of Defense Program has been presented to numerous parish, state and federal officials. It is also publicly accessible on the web.



**Figure 1:** Location of the Breton Land Bridge Restoration Project. The project includes marsh creation and shoreline protection. This project is one ten projects in the Pontchartrain Coastal Lines of Defense Program.

Lake Pontchartrain Basin Foundation, 2006, Comprehensive Habitat Management Plan for the Pontchartrain Basin, <http://www.saveourlake.org/wetlands.htm> on April 2006

Lake Pontchartrain Basin Foundation, 2006, Pontchartrain Coastal Lines of Defense Program, <http://www.saveourlake.org/wetlands.htm> on April 2006

Lopez, J. A., 2006, The Multiple Lines of Defense Strategy to Sustain Coastal Louisiana, white paper, Lake Pontchartrain Basin Foundation

## **Fact Sheet –Breton Land Bridge Restoration Project**

**Project Name:** Breton Land Bridge Restoration Project

### **Coastal Planning**

Comprehensive Habitat Management Plan – endorsed by CRCL and LA Wildlife Federation  
Nominated by U.S. FWS and is currently a CWPPRA candidate project for PPL 16

### **Project Location**

Region 1, Breton Basin, Plaquemines Parish

#### **Problem**

The landfall of Hurricane Katrina in southeast Louisiana destroyed thousands of acres of marsh and other coastal habitats east of the Mississippi River. One of the areas most severely impacted was the Breton Sound Basin where it is estimated 40.9 square miles of marsh were converted to open water. The operational plan of Caernarvon Freshwater diversion for 2006 proposes higher discharge during the winter and spring to address the hurricane impact. However, this discharge will have little potential to rebuild wetlands near the Breton Land Bridge- an area located south of Lake Lery between Delacroix and Oak River. Without restoration this region will begin to see the coalescence of water bodies such as Grand Lake, Lake Petit, and the surrounding marsh areas resulting in more direct connection between interior marshes and the open Black Bay system.

#### **Proposed Project Features**

According to USGS-NWRC mapping, much of the wetlands between the MRGO and the Mississippi River were damaged due to Hurricane Katrina. This project would use dedicated dredging or long distance piping from Mississippi River sediment to restore wetlands on the Breton Land Bridge that were destroyed during the passage of Hurricane Katrina. Vegetative plantings would also be used to stabilize lake shorelines damaged by Hurricane Katrina.

#### **Goals**

- Restore critical wetlands destroyed by Hurricane Katrina
- Maintain the Breton Land Bridge

#### **Preliminary Project Benefits**

- 1) Direct benefits= 905 acres created marsh and 645 acres of vegetative plantings totaling 1,550 acres.  
Indirect benefits=Petite Lake rim.
- 2) Over the 20 year project life 369 acres of marsh will be created through hydraulic dredging and 308 acres of marsh will be reclaimed due to vegetative planting. Total direct benefits would be  $369 + 308 = 677$ .

### **Identification of Potential Issues**

#### **Preliminary Construction Costs**

Total estimated construction cost is \$30- 35M

#### **Preparers of Fact Sheet**

John Lopez – Lake Pontchartrain Basin Foundation (some text and map taken from CWPPRA fact sheet)

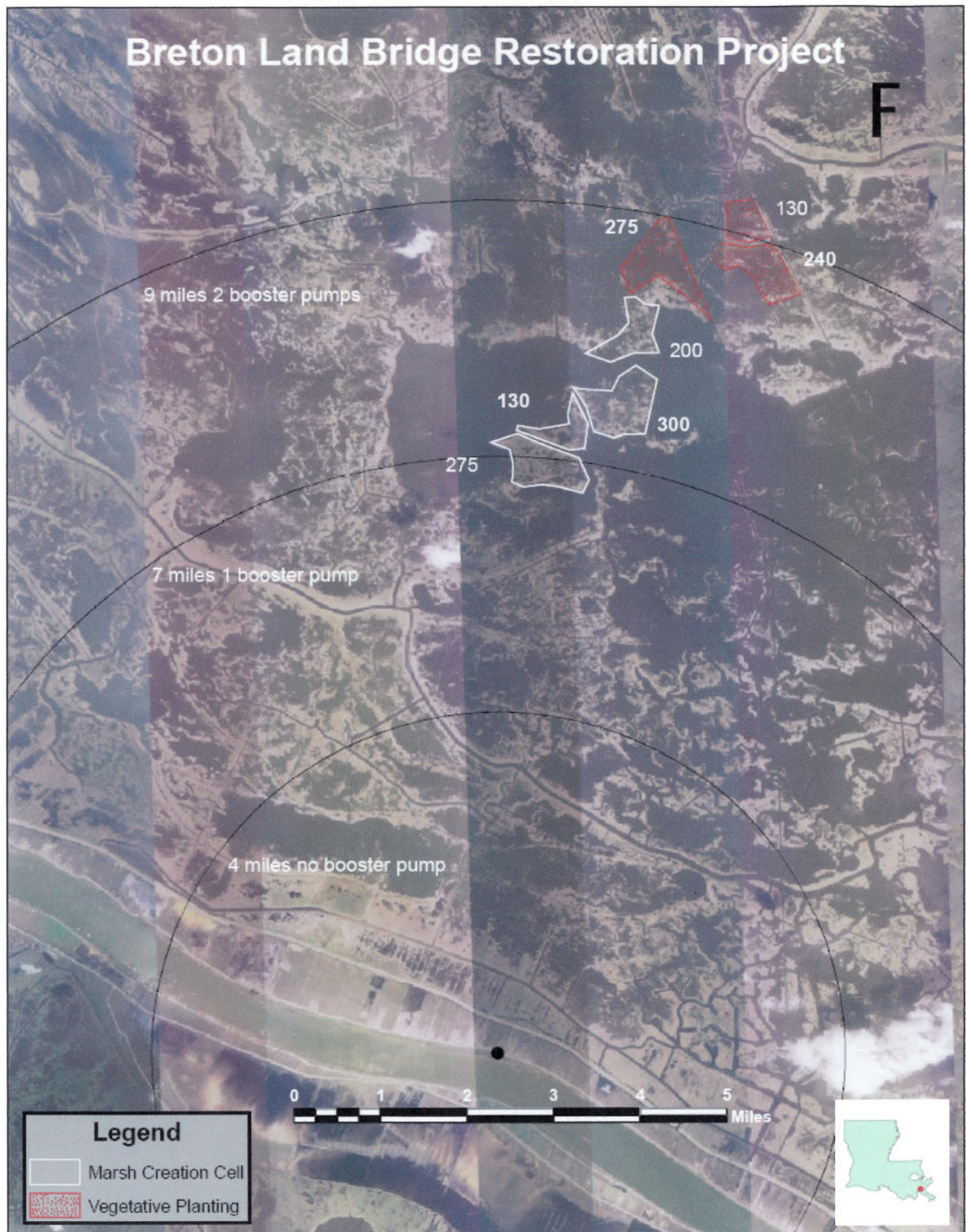
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**Figure 2:** Location of marsh creation of or the Breton Land Bridge Restoration Project.